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<b>(54) Title:</b> METHOD AND APPARATUS FOR INCENTIVE POINTS MANAGEMENT			
<b>(57) Abstract</b> <p>A method and apparatus for incentive points management is disclosed. The present invention provides a method and apparatus for incentive points management based on usage of computerized resources. In one embodiment, non-usage based points can also be awarded. Briefly, a threshold value is used for awarding points such that points are awarded for use of a resource over a predetermined threshold value (410). For example, if a particular Web site is accessed via a participating network for 20 contiguous minutes (410) a predetermined number of incentive points are awarded (420). Incentive points can then be awarded in 20 minute increments or on a different scale. In one embodiment, incentive points are awarded to both the user and to an organization to which the user belongs. In one embodiment, affinity points are awarded in addition to incentive points. Affinity points are awarded based on more active participation (440). For example, affinity points can be awarded for purchases of particular items or purchases of particular amounts. Affinity points can also be awarded for specific actions, for example, switching telephone long distance providers, filling out an online survey form, or making a purchase online instead of through traditional channels (430).</p>			
<pre>graph TD     START([START]) --&gt; 400[DETERMINE WHEN USER HAS ACCESSED A PARTICIPATING RESOURCE 400]     400 --&gt; 410{410 TIME &gt; THRESHOLD ?}     410 -- NO --&gt; 400     410 -- YES --&gt; 420[AWARD INCENTIVE POINTS 420]     420 --&gt; 430[MONITOR USER ACTIVITY 430]     430 --&gt; 440[AWARD ADDITIONAL INCENTIVE POINTS IF APPROPRIATE 440]     440 --&gt; DONE([DONE])</pre>			

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METHOD AND APPARATUS FOR  
INCENTIVE POINTS MANAGEMENT

FIELD OF THE INVENTION

The present invention relates to incentive point management. More particularly, the present invention relates to an integrated system and incentive points management scheme that awards points based, at least in part, on utilization of computerized resources.

BACKGROUND OF THE INVENTION

Current incentive points schemes are typically based on awards for purchases, for example, frequent flyer programs. One such computerized implementation of such a scheme is disclosed in U.S. Patent No. 5,774,870 entitled "FULLY INTEGRATED, ON-LINE INTERACTIVE FREQUENCY AND AWARD REDEMPTION PROGRAM" issued to Thomas W. Storey ('870 Patent). However, the '870 Patent provides awards for purchases only. Therefore, a participant must be a consumer of related products and must be in the market to purchase the products. Thus, non-consuming individuals are not provided with the incentive points, which may result in a less than optimal audience for the provider of the incentive points.

Another incentive program is disclosed in U.S. Patent No. 5,794,210 entitled "ATTENTION BROKERAGE" issued to Goldhaber, et al. ('210 Patent). The '210 Patent is based on a concept of "negatively priced information" that requires a participant to actively choose to be involved in advertising. The '210 Patent further discloses a concept of "orthogonal sponsorship" where sponsorship in the form of advertising is not linked to specific programming. A user chooses to be subjected to advertising in order to receive an award. Thus, the '210 Patent describes a system that is solely driven by individual user's explicit participation on a spot-by-spot basis. However, many people actively avoid advertisements by, for example, channel surfing during commercial breaks. In general, the incentive to view an individual ad as the result of incentives provided in accordance with the '210 patent will be insufficient to achieve significant success. This

system is best suited to the limited audience of active consumers of a specific product.

However, this audience is not the primary target of traditional "Brand imaging" mass market advertisers. Indeed, it is sponsored content (linked) associations and the repeated presentation of brand image messages that creates the "Brand awareness" and "Brand associations" that mass market advertisers seek. Because the incentive program disclosed in the '210 patent requires active participation to begin involvement, the distribution of participation may be less than desired by marketing parties, or the cost per impression may be too high, or both.

What is needed is a dynamic, flexible, interactive incentive program that passively monitors actions by users of computing devices and does not interfere with use of the computer system or other device while effecting brand image or other impressions and or messages on a target audience.

### **SUMMARY OF THE INVENTION**

A method and apparatus for incentive points management is described. Use of a computerized resource by a user is passively monitored. Incentive points are awarded based, at least in part, on use of the computerized resource by the user when the use exceeds a predetermined threshold value. A balance of incentive points for the user is maintained based on a predetermined set of policies.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

The present invention is illustrated by way of example, and not by way of limitation in the figures of the accompanying drawings in which like reference numerals refer to similar elements.

**Figure 1** is one embodiment of a computer system suitable for use with the present invention.

**Figure 2** is one embodiment of a network configuration suitable for use with the present invention.

**Figure 3** is one embodiment of a network operations center coupled to a network suitable for use with the present invention.

**Figure 4** is a flow chart for awarding incentive points according to one embodiment of the present invention.

#### **DETAILED DESCRIPTION**

A method and apparatus for incentive points management is described. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be apparent, however, to one skilled in the art that the present invention can be practiced without these specific details. In other instances, structures and devices are shown in block diagram form in order to avoid obscuring the present invention.

Reference in the specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the invention. The appearances of the phrase "in one embodiment" in various places in the specification are not necessarily all referring to the same embodiment.

The present invention provides a method and apparatus for incentive points management based on usage of computerized resources. In one embodiment, non-usage based points can also be awarded. Briefly, a threshold value is used for awarding points such that points are awarded for use of a resource over a predetermined threshold value. For example, if a particular group of Web page are accessed via a participating network for 20 minutes a predetermined number of incentive points are awarded. Incentive points can then be awarded in 20 minute increments or on a different scale. In one embodiment, incentive points are awarded to both the user and to an organization to which the user belongs.

In one embodiment, affinity points are awarded in addition to incentive points. Affinity points are awarded based on more active participation. For example, affinity points can be awarded for purchases of particular items or purchases of particular

amounts. Affinity points can also be awarded for specific actions, for example, switching telephone long distance providers, filling out an online survey form, making a purchase online instead of through traditional channels, or for purchasing from a specific source either online or off-line.

**Figure 1** is one embodiment of a computer system suitable for use with the present invention. The computer system of Figure 1 can be used in various capacities with the present invention. For example, the computer system can be a terminal used by a user to access local or remote resources, the computer system can be a server providing remote access to a resource, or the computer system can be a proxy server providing access to remote computer systems.

Computer system 100 includes bus 101 or other communication device for communicating information and processor 102 coupled to bus 101 for processing information. Computer system 100 further includes random access memory (RAM) or other dynamic storage device 104 (referred to as main memory), coupled to bus 101 for storing information and instructions to be executed by processor 102. Main memory 104 also can be used for storing temporary variables or other intermediate information during execution of instructions by processor 102. Computer system 100 also includes read only memory (ROM) and/or other static storage device 106 coupled to bus 101 for storing static information and instructions for processor 102. Data storage device 107 is coupled to bus 101 for storing information and instructions.

Data storage device 107 such as a magnetic disk or optical disc and corresponding drive can be coupled to computer system 100. Computer system 100 can also be coupled via bus 101 to display device 121, such as a cathode ray tube (CRT) or liquid crystal display (LCD), for displaying information to a computer user. Alphanumeric input device 122, including alphanumeric and other keys, is typically coupled to bus 101 for communicating information and command selections to processor 102. Another type of user input device is cursor control 123, such as a mouse, a trackball, or cursor direction keys for communicating direction information and command selections to processor 102 and for controlling cursor movement on display 121.

Computer system 100 further includes network interface 130 to provide access to a network, such as a local area network. One embodiment of the present invention is related to the use of computer system 100 to provide all or a portion of an incentive points management scheme. According to one embodiment, dynamic incentive points management is performed by one or more computer systems in response to processor(s) executing sequences of instructions contained in memory.

Instructions are provided to memory from a storage device, such as magnetic disk, a read-only memory (ROM) integrated circuit, CD-ROM, DVD, via a remote connection (e.g., over a network via network interface 130), etc. In alternative embodiments, hard-wired circuitry can be used in place of or in combination with software instructions to implement the present invention. Thus, the present invention is not limited to any specific combination of hardware circuitry and software instructions.

Figure 2 is one embodiment a network configuration suitable for use with the present invention. The configuration of Figure 2 is described in terms of both land based communications and satellite communications; however, the manner of communication is not central to the present invention. Therefore, the present invention is applicable to any interconnection of devices that provide access to local and remote resources.

Wide area network 200 provides an interconnection between multiple local area networks (e.g., 220 and 230), individual terminals (e.g., 260) and one or more network operations centers (e.g., 250). In one embodiment, wide area network 200 is the Internet; however, any wide area network (WAN) or other interconnection can be used to implement wide area network 200.

Terminal 260 is an individual terminal that provides access to network resources as well as local resources for a user thereof. In one embodiment, terminal 260 is a personal computer connected to wide area network 200 via a modem, a wireless connection, etc.

Alternatively, terminal 260 can be a set-top box such as a WebTV™ terminal available from Sony Electronics, Inc. of Park Ridge, New Jersey, or a set-top box using a cable modem to access a network such as the Internet. Similarly, terminal 260 can be a "dumb"

terminal or a thin client device such as the ThinSTAR™ available from Network Computing Devices, Inc. of Mountain View, California.

Local area network 220 provides an interconnection of devices at a local level. For example, local area network 220 can interconnect multiple computers, printers, and other devices within one or more buildings. Local area network 220 is coupled to wide area network 200. Similarly, local area network 230 provides an interconnection of devices. However, local area network 230 is coupled to satellite communications devices 240 as well as wide area network 200.

Network operations center 250 is coupled to wide area network 200 and provides access to network resources for terminal 260, local area network 220 and local area network 230. Communication between network communications center 250 and either terminal 260 or local area network 220 is accomplished by wide area network 200. As described in greater detail below, network operations center 250 and local area network 230 communicate via wide area network 200 and/or satellite communications devices 240.

In one embodiment network operations center 250 includes multiple servers (not shown in Figure 2) that provide access to network and other resources. For example, in an Internet service provider (ISP) implementation, network operations center 250 can include a Web proxy server that provides access to the World Wide Web (WWW, or the Web) for devices of local area network 220, local area network 230 and terminal 260. Network operations center 250 can also include other devices, such as a middleware server or a file server that provide information to devices coupled to network operations center 250.

In one embodiment, information is communicated between network operations center 250 and local area network 230 via uni-cast, multicast or broadcast satellite communications devices 240, which includes necessary components to provide communications between network operations center 250 and local area network 230. In one embodiment, satellite communication are accomplished using Transmission Control Protocol/Internet Protocol (TCP/IP) embedded within a digital video broadcast (DVB) stream; however, alternative communication protocols can be used. In one embodiment, satellite communications are bi-directional. Alternatively, if satellite communications are



uni-directional, wide area network 200 can be used to provide a hybrid, asymmetric bi-directional communications system such as the SkySurfer™ platform available from Gilat Satellite Networks, Inc. of McLean, Virginia.

Figure 3 is one embodiment of a network operations center coupled to a network suitable for use with the present invention. With respect to description of Figure 3, wide area network 200 and satellite communications devices 240 are implemented as described above in Figure 2. Notwithstanding being described as including certain types of servers and other devices, network operations center 250 can include different or additional components as well as multiple components, for example, multiple web servers. Each server can be one or more software and/or hardware components. Network operations center (NOC) 250 provides resources to local area networks and individual terminals (not shown in Figure 3) as well as a gateway to a larger network such as the Internet. Thus, network operations center 250 can be used to provide a controlled set of resources while being part of a larger network. This is particularly advantageous in situations where users of the local area networks are somewhat homogenous. For example, students in similar grade levels, professionals, and other shared interest groups.

Additional uses and details of the network of Figure 2 and the network operations center of Figure 3 can be found in U.S. Patent application number 09/216,016 (P001), entitled "OPTIMIZING BANDWIDTH CONSUMPTION FOR DOCUMENT DISTRIBUTION OVER A MULTICAST ENABLED WIDE AREA NETWORK," U.S. Patent application number 09/216,018 (P002), entitled "A METHOD AND APPARATUS FOR SUPPORTING A MULTICAST RESPONSE TO A UNICAST REQUEST FOR DATA," and U.S. Patent application number 09/213,614 entitled "AN ENTITY MODEL THAT ENABLES PRIVILEGE TRACKING ACROSS MULTIPLE TERMINALS" all of which are assigned to the corporate assignee of the present invention. NOC router 300 is coupled to NOC LAN 305 and provides routing and firewall functionality for the servers and other components of network operations center 250. NOC router 300 can be implemented in any manner known in the art. In one embodiment,

database 360 is coupled to NOC LAN 305. Database 360 can be used, for example, to store information about authorized users of associated local area networks, or to store information about resources that are available on each terminal connected to the network. Database 360 can also be used to store statistics about network usage, advertisements to be downloaded to devices of the local area networks, etc. In one embodiment database 360 is used to maintain incentive and/or affinity point balances for multiple users and/or multiple organizations. Data store 365 represents data stored by database 360 and can be one or more physical devices and logical data tables. In one embodiment, data store 365 is used to maintain incentive and/or affinity point balances.

Master proxy server 370 is also coupled to NOC LAN 305 to provide World Wide Web resources to devices of the connected local area network(s) or individual terminals. In one embodiment web server 310 is a Hypertext Markup Language (HTML) and/or Secure Sockets Layer (SSL) server. Of course, Web server 310 can be another type of server. Web cache 320 is used to store Web resources (e.g., Web pages) that are most often accessed, most recently accessed, etc. In one embodiment, Web cache 320 stores a predetermined set of Web resources that are provided to the local area networks. In a school network environment, the cached Web resources can be, for example, a preapproved set of Web pages. In one embodiment all or a portion of the contents of Web cache 320 are replicated on local networks.

Middleware server 330 manages database applications in network operations center 150. For example, middleware server 330 can determine which users have access to Web server 310. In one embodiment, middleware server 330 is central in the incentive and/or affinity points management scheme of the present invention. Middleware server 330 can also be replicated on local area networks, such as local area networks 220 and 230 of Figure 2, while providing the incentive and/or affinity points management scheme of the present invention. Operation of middleware server 330 in connection with the present invention is described in greater detail below.

In one embodiment middleware server 330 provides management of incentive and/or affinity points. Middleware server 330 can manage points by monitoring user

sessions as the sessions occur (i.e. dynamic points management) or by evaluating sessions after the end of the respective sessions (i.e., retroactive points management). With either monitoring scheme, middleware server 330 stores point information in database 360.

Points can also be awarded according to both dynamic and retroactive schemes.

Application server 340 provides applications programs to devices coupled to network operations center 250. Application server 340 conceptually represents two different types of servers. Application server 340 can be part of a client-server architecture where the server provides data to a client (e.g., HTML server, e-mail server, bulletin board server). Application server 340 can also be a software distribution and management server.

For dynamic incentive points management, middleware server 300 awards points as the points are earned. For example, if a user accesses a participating computerized resource for a predetermined period of time the user's incentive points balance stored in database 360 is incremented at the end of the predetermined period of time. In such an embodiment, a point balance can be continuously displayed to the user, which provides immediate feedback to the user when incentive points are earned effecting a slot machine or lotto style feedback. Affinity points can be managed in a similar manner.

For retroactive points management, middleware sever 330 analyzes session logs after the session is completed to determine whether points should be awarded. In one embodiment, middleware server 330 uses a session identifier for a particular session to identify the user to which points should be awarded, if appropriate. The session identifier is also used to analyze logs of other servers, such as master proxy server 370, to determine whether the user accessed participating computerized resources and information related to the access (e.g., length of access, transactions completed, information provided). In response to the session analysis, points are awarded by middleware server 330 and stored in database 360.

**Figure 4** is a flow chart for awarding incentive points according to one embodiment of the present invention. In one embodiment a client application used to access computerized resources determines when a user accesses a resource that is participating in

the incentive points scheme at 400. In alternative embodiments, other devices, such as a middleware server or the computerized resource determine when the user accesses a participating resource. In one embodiment, only authorized users that are included in the incentive points management scheme are monitored as described with respect to Figure 4. The device monitoring user access to a participating device determines whether access time exceeds a predetermined threshold time at 410. Requiring a minimal threshold time is not necessary to implement an incentive points management scheme; however, such a threshold value improves the likelihood that accesses for which incentive points are awarded are significant to the provider of the resource.

Incentive points are awarded at 420 if access to the computerized resource exceeds the predetermined threshold value. In one embodiment, a middleware server causes a database at a network operations center to increase the balance of incentive points for the user accessing the computerized resource. Alternatively, the middleware server and/or the database maintaining the incentive points balance for the user can be replicated to a local area network on which the user is using a terminal to access the computerized resource. In an alternative embodiment, the client application initiates the award. In such an embodiment, the client application sends a message to the middleware server at the conclusion of a session to report incentive and/or affinity point balance changes. The middleware server in turn changes point balances accordingly.

User activity is monitored at 430 after the initial incentive points are awarded. Additional incentive points are awarded, if appropriate at 440. Additional incentive points beyond the initial incentive points awarded can be awarded on a different schedule than the initial incentive points. For example, incentive points can be awarded on a minute-by-minute basis, or incentive points can be awarded based on a different threshold value. In one embodiment, a predetermined number of incentive points are awarded to a user for each 20-minute period that the user accesses a participating resource. In one embodiment incentive point balances are maintained for individual users and an additional incentive point balance is maintained for an organization to which multiple users belong. For example, multiple students in a school system can have access to one or

more terminals such as terminal 260 of Figure 2 or the terminals can be included in local area networks 220 or 230 of Figure 2. The students can individually have incentive points balances and the school that the students attend can have an incentive points balance that is based, at least in part, on the individual student incentive balances.

In one embodiment an organization automatically receives an increase its incentive point balance that is equal to the sum of the incentive points earned by members of the organization over a predetermined period of time. For example, at the end of each month a school can automatically receive the number of incentive points earned by students of that school. The number of points received by the organization is not required to be equal to the number of points earned by members of the organization.

The organization can distribute points either manually (e.g., as awards for an essay contest) or automatically (e.g., by the middleware server based on attendance data). The organization can also redeem the points for organizational purposes. Redemption of incentive points is described in greater detail below. Of course other schemes for distribution of incentive points to organizations can also be implemented.

In one embodiment a predetermined number of points are allotted to be distributed over a predetermined period of time. For example, one million points can be allotted over a three month period. In one embodiment, during the predetermined period of time points are distributed as described above. At the end of the predetermined period of time, any excess points are automatically distributed evenly to participating organizations.

Alternatively, the excess points are automatically distributed to the participating organizations based on the number of points earned by members of each organization. In another alternative, excess points are distributed using a lottery system.

In one embodiment, in addition to awarding incentive points as described above, the present invention also awards affinity points based on predetermined criteria. Affinity points can be awarded for specific transactions entered into by users. For example, if a student purchases a personal computer, set-top box, or thin client for educational use, the student can be awarded affinity points that can be used in association with an educational network, such as the network described above that is used for educational purposes.

Affinity points are awarded by, on in behalf of, sponsors that are associated with the network on which the user can earn incentive points.

In one embodiment, affinity point balances are maintained in a similar manner as incentive point balances are maintained. Affinity points can be exchanged for incentive points rather than being used for separate purposes. In one embodiment, affinity points are automatically awarded to an organization to which individual users are associated.

In one embodiment, points earned during a predetermined period of time must be redeemed during the predetermined period of time or their value is lost. For example, points can be earned by students during a quarter or semester and lose their value if not redeemed during the quarter or semester. Alternatively, each individual point can have an independent life span during which the point is valid. Of course, points can also be valid indefinitely.

In one embodiment, the validity of either individual points or groups of points are maintained on a middleware server and stored in the data store 356 in a network operations center. As described above, the middleware server can be replicated to a local server. Validity of points can also be maintained on a terminal used by a user, for example, by a client application that the user uses to earn points. If point balances are maintained by the client application, the client application can communicate point balances to the middleware server for storage when the user is not using the client application.

Incentive and/or affinity points can be redeemed in one or more of the following manners. An award pool can be determined at the beginning of a predetermined period of time. Points can be redeemed for the awards in the award pool either through an auction or through a fixed redemption schedule. Points can be redeemed at an online store that provides awards at fixed prices like an ordinary store.

Points can be used as part of a bartering process. For example, points can be traded for goods and/or services in an open market environment. For example, a chat room can be established for trade and/or redemption of points. Points can be redeemed for cash or a cash equivalent, such as electronic case (e-cash), coupons and/or gift certificates.

In the foregoing specification, the present invention has been described with reference to specific embodiments thereof. It will, however, be evident that various modifications and changes can be made thereto without departing from the broader spirit and scope of the invention. The specification and drawings are, accordingly, to be regarded in an illustrative rather than a restrictive sense.

The first of these is the fact that the
 government has been unable to
 control the money supply. This
 has led to a situation where
 the value of the dollar has
 fallen to a level that is
 well below its purchasing
 power. This has led to a
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 government is unable to
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**CLAIMS**

What is claimed is:

1. A method of incentive points management, the method comprising:  
passively monitoring use of a computerized resource by a user;  
awarding incentive points based, at least in part, on use of the computerized resource; and  
maintaining a balance of incentive points for the user based on a predetermined set of policies.
2. The method of claim 1 further comprising awarding points based on a predetermined action taken by the user with the computerized resource.
3. The method of claim 2 wherein the predetermined action comprises an online interaction with the computerized resource.
4. The method of claim 1 further wherein one or more of the predetermined policies comprises expiration periods for the incentive points.
5. The method of claim 1 wherein one or more of the predetermined policies comprises maintaining an incentive point balance for an organization with which the user is associated.
6. The method of claim 1 wherein one or more of the predetermined policies comprises redeeming incentive points for awards.
7. The method of claim 1 wherein the threshold value comprises a period of time.



8. The method of claim 1 wherein the threshold value comprises a number of interactions with a predetermined set of computerized resources.

9. The method of claim 1 wherein the incentive points are maintained on a storage device coupled to a network operations center and a device that the user is using is coupled to a local area network, and further wherein the computerized resource is external to the local area network.

10. The method of claim 9 wherein the device accesses the computerized resource via a network operations center.

11. The method of claim 9 wherein the storage device is replicated to the local area network.

12. An apparatus for incentive points management, the apparatus comprising:  
means for passively monitoring use of a computerized resource by a user;  
means for awarding incentive points based, at least in part, on use of the computerized resource ; and  
means for maintaining a balance of incentive points for the user based on a set of predetermined policies.

13. The apparatus of claim 12 further comprising means for awarding points based on a predetermined action taken by the user with the computerized resource.

14. The apparatus of claim 13 wherein the predetermined action comprises an online interaction with the computerized resource.

15. The apparatus of claim 12 further wherein the predetermined policy comprises expiration periods for the incentive points.

16. The apparatus of claim 12 wherein the predetermined policy comprises maintaining an incentive point balance for an organization with which the user is associated.

17. The apparatus of claim 12 wherein the predetermined policy comprises redeeming incentive points for awards;

18. The apparatus of claim 12 wherein the threshold value comprises a period of time;

19. The apparatus of claim 12 wherein the threshold value comprises a number of interactions with a predetermined set of computerized resources;

20. The apparatus of claim 12 wherein the incentive points are maintained on a storage device coupled to a network operations center and a device that the user is using is coupled to a local area network, and further wherein the computerized resource is external to the local area network.

21. The apparatus of claim 20 wherein the device accesses the computerized resource via a network operations center.

22. The apparatus of claim 20 wherein the storage device is replicated to the local area network.

23. A machine-readable medium having stored thereon sequences of instructions that when executed by a processor cause the processor to:  
passively monitor use of a computerized resource by a user;

award incentive points based, at least in part, on use of the computerized resource;  
and  
maintain a balance of incentive points for the user based on a set of predetermined policies.

24. The machine-readable medium of claim 23 further comprising sequences of instructions that when executed cause the processor to award points based on a predetermined action taken by the user with the computerized resource.

25. The machine-readable medium of claim 24 wherein the predetermined action comprises an online interaction with the computerized resource.

26. The machine-readable medium of claim 23 further wherein the predetermined policy comprises expiration periods for the incentive points.

27. The machine-readable medium of claim 23 wherein the predetermined policy comprises maintaining an incentive point balance for an organization with which the user is associated.

28. The machine-readable medium of claim 23 wherein the predetermined policy comprises redeeming incentive points for awards.

29. The machine-readable medium of claim 23 wherein the threshold value comprises a period of time.

30. The machine-readable medium of claim 23 wherein the threshold value comprises a number of interactions with a predetermined set of computerized resources.

31. The machine-readable medium of claim 23 wherein the incentive points are maintained on a storage device coupled to a network operations center and a device that the user is using is coupled to a local area network, and further wherein the computerized resource is external to the local area network.

32. The machine-readable medium of claim 31 wherein the device accesses the computerized resource via a network operations center.

33. The machine-readable medium of claim 31 wherein the storage device is replicated to the local area network.

34. A wide area network of devices comprising:  
a first local area network having a computerized resource;  
a second local area network having a terminal used by a user to access the computerized resource;  
wherein incentive points are awarded to the user based, at least on part, on whether use of the computerized resource exceeds a predetermined threshold.

35. The wide area network of claim 34, wherein the predetermined threshold is a period of time.

36. The wide area network of claim 34 wherein the predetermined threshold is a number of transactions.

37. The wide area network of claim 34, further wherein incentive points are awarded to the user based, at least in part, on the user performing a predetermined interactions with the computerized resource.

38. The wide area network of claim 34 further comprising a network operations center having a database to maintain one or more incentive points balances.

39. The wide area network of claim 38 wherein the network operations center is replicated on the second local area network.

40. The wide area network of claim 38 wherein the database maintains one or more point balances for an organization with which the user is associated.

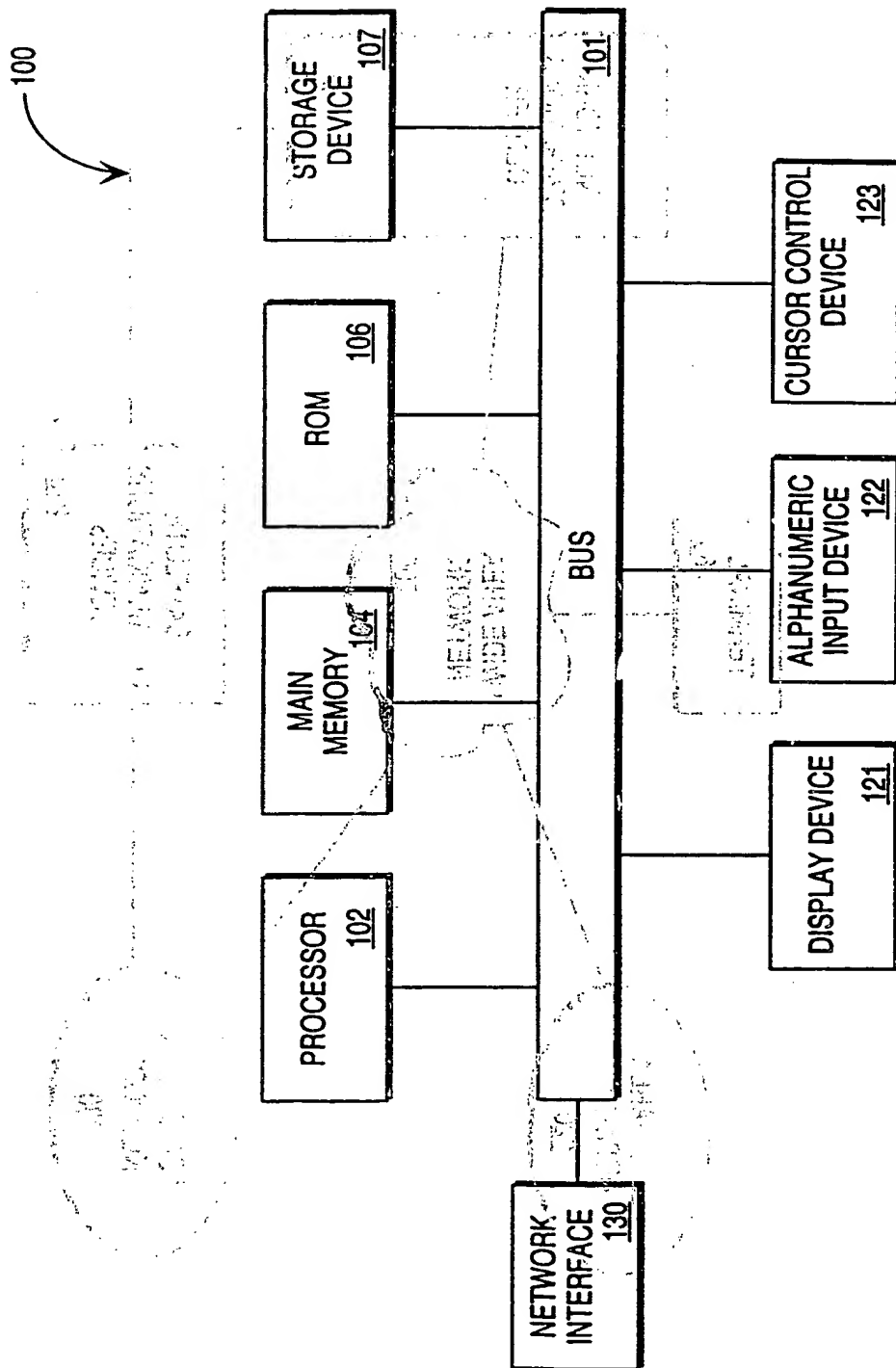
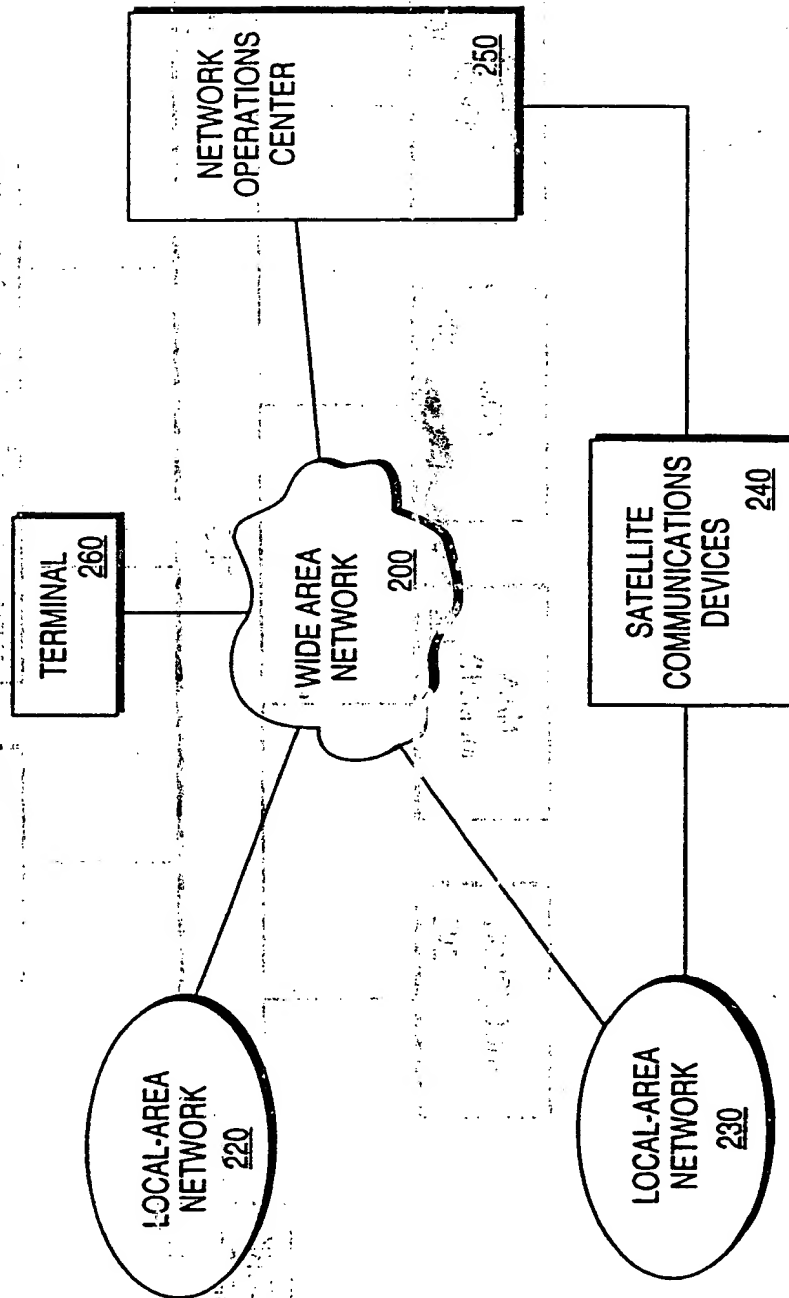


FIG. 1

**FIG. 2**

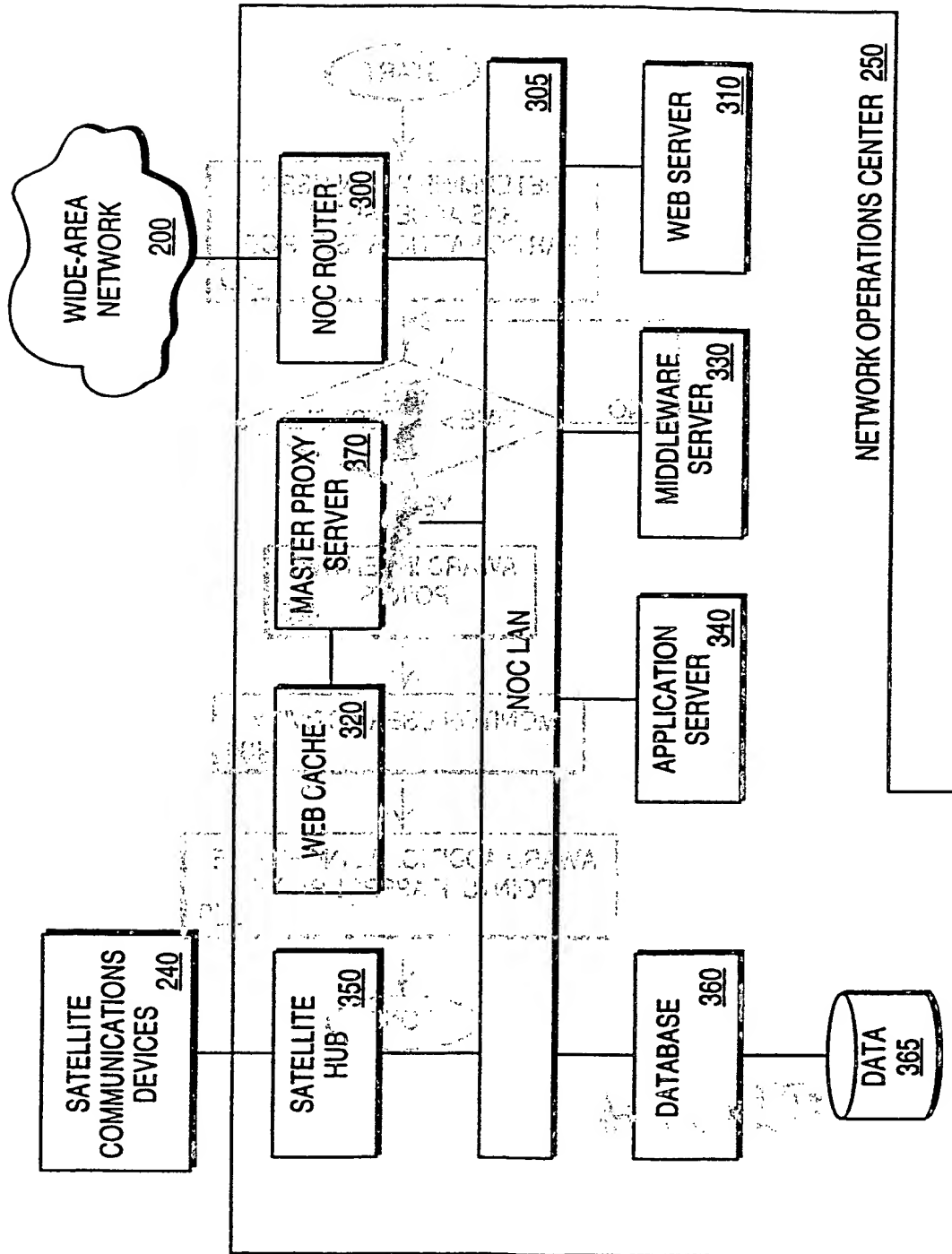
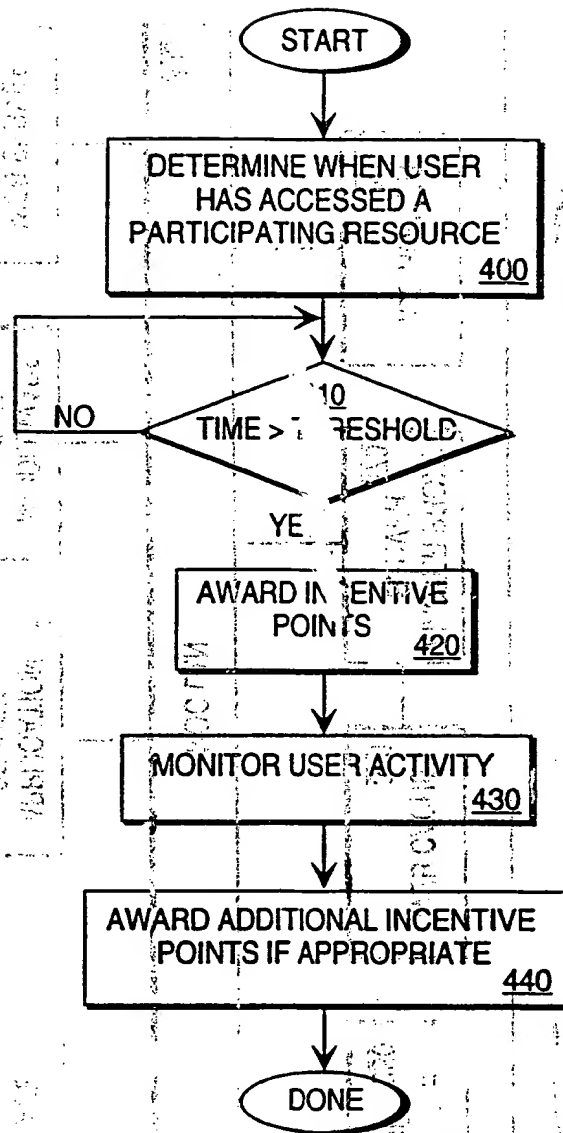


FIG. 3



**FIG. 4**

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/30131

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 17/60

US CL : 705/14, 26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/14, 26

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search term used)

EAST, WEST, ONLINE, DIALOG

search terms: world wide web, online, web site, incentive, point, credit, award

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,774,870 A (STOREY) 30 June 1998, see abstract, col. 1, lines 55-67, col. 2, lines 1-27.	1-40
A	US 5,794,210 A (GOLDHABER et al.) 11 August 1998, see abstract.	1-40
A	UNKNOWN. Host of New Coupon Competitors Jump into the Internet Promotions Fray. Electronic Advertising & Marketplace Report, November 17, 1998, Vol. 12, No. 21.	1-40
A	UNKNOWN. Recent Study Finds Gap Remains Between Male, Female Shoppers. Electronic Advertising & Marketplace Report, 22 September 1998, Vol. 12, No. 17.	1-40



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

17 FEBRUARY 2000

Date of mailing of the international search report

31 MAR 2000

Name and mailing address of the ISA/US

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# INTERNATIONAL SEARCH REPORT

International application No.  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	UNKNOWN: Netcentives Awarded U.S. Patent for Online Shopping Rewards Program. PR Newswire. 27 August 1998.	1-40
A	ALEXANDER, KEITH L. Net Surfers Rack Up Travel Miles. USA Today, 29 September 1997, Page B1.	1-40
A	UNKNOWN: THINK New Ideas Inc. Chosen by Omnicom Subsidiary to Design and Produce NetPerks Web Site. Business Wire. 8 January 1997.	1-40
A	BERGER, M. Rewarding the Frequent Surfer. Sales & Marketing Management. January 1998, Vol. 150, No. 1, Pages 86-87.	1-40
A	KAYDO, C. Mining the Internet for advertising. Sales & Marketing Management. September 1996, Vol. 148, No. 9, Pages 78-8.	1-40

1949年10月1日，中华人民共和国成立。这一天，中国历史翻开了新的一页。从此，中国人民站起来了，中国开始了新的征程。

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*Journal of Management Education* 36(7)>

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*Journal of Management Studies*, 19(1), 67-80.

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